



Sun Ultra™ 10 EMI Retrofit Guide

Includes New CD-ROM Cable
Installation Instructions for
Cable Kit F370-3267-03

Sun Microsystems, Inc.
4150 Network Circle
Santa Clara, CA 95054 U.S.A.
650-960-1300

Part No. 816-2780-11
May 2002, Revision A

Send comments about this document to: docfeedback@sun.com

Copyright 2002 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, CA 95054 U.S.A. All rights reserved.

This product or document is distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this product or document may be reproduced in any form by any means without prior written authorization of Sun and its licensors, if any. Third-party software, including font technology, is copyrighted and licensed from Sun suppliers.

Parts of the product may be derived from Berkeley BSD systems, licensed from the University of California. UNIX is a registered trademark in the U.S. and other countries, exclusively licensed through X/Open Company, Ltd.

Sun, Sun Microsystems, the Sun logo, Ultra, and Solaris are trademarks, registered trademarks, or service marks of Sun Microsystems, Inc. in the U.S. and other countries. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc. The Energy Star logo is a registered trademark of EPA.

The OPEN LOOK and Sun™ Graphical User Interface was developed by Sun Microsystems, Inc. for its users and licensees. Sun acknowledges the pioneering efforts of Xerox in researching and developing the concept of visual or graphical user interfaces for the computer industry. Sun holds a non-exclusive license from Xerox to the Xerox Graphical User Interface, which license also covers Sun's licensees who implement OPEN LOOK GUIs and otherwise comply with Sun's written license agreements.

Federal Acquisitions: Commercial Software—Government Users Subject to Standard License Terms and Conditions.

DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

Copyright 2002 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, CA 95054 Etats-Unis. Tous droits réservés.

Ce produit ou document est distribué avec des licences qui en restreignent l'utilisation, la copie, la distribution, et la décompilation. Aucune partie de ce produit ou document ne peut être reproduite sous aucune forme, par quelque moyen que ce soit, sans l'autorisation préalable et écrite de Sun et de ses bailleurs de licence, s'il y en a. Le logiciel détenu par des tiers, et qui comprend la technologie relative aux polices de caractères, est protégé par un copyright et licencié par des fournisseurs de Sun.

Des parties de ce produit pourront être dérivées des systèmes Berkeley BSD licenciés par l'Université de Californie. UNIX est une marque déposée aux Etats-Unis et dans d'autres pays et licenciée exclusivement par X/Open Company, Ltd.

Sun, Sun Microsystems, le logo Sun, Ultra, et Solaris sont des marques de fabrique ou des marques déposées, ou marques de service, de Sun Microsystems, Inc. aux Etats-Unis et dans d'autres pays. Toutes les marques SPARC sont utilisées sous licence et sont des marques de fabrique ou des marques déposées de SPARC International, Inc. aux Etats-Unis et dans d'autres pays. Les produits portant les marques SPARC sont basés sur une architecture développée par Sun Microsystems, Inc.

L'interface d'utilisation graphique OPEN LOOK et Sun™ a été développée par Sun Microsystems, Inc. pour ses utilisateurs et licenciés. Sun reconnaît les efforts de pionniers de Xerox pour la recherche et le développement du concept des interfaces d'utilisation visuelle ou graphique pour l'industrie de l'informatique. Sun détient une licence non exclusive de Xerox sur l'interface d'utilisation graphique Xerox, cette licence couvrant également les licenciés de Sun qui mettent en place l'interface d'utilisation graphique OPEN LOOK et qui en outre se conforment aux licences écrites de Sun.

LA DOCUMENTATION EST FOURNIE "EN L'ETAT" ET TOUTES AUTRES CONDITIONS, DECLARATIONS ET GARANTIES EXPRESSES OU TACITES SONT FORMELLEMENT EXCLUES, DANS LA MESURE AUTORISEE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT TOUTE GARANTIE IMPLICITE RELATIVE A LA QUALITE MARCHANDE, A L'APTITUDE A UNE UTILISATION PARTICULIERE OU A L'ABSENCE DE CONTREFAÇON.



Sun Ultra 10 EMI Retrofit Guide

Note – If you are replacing the CD-ROM cable as part of the F370-3267-03 cable kit, go to “Installing the New CD-ROM Drive Cable” on page 8.

The *Sun Ultra 10 EMI Retrofit Guide* describes how to reduce electromagnetic interference (EMI) emitted by the Ultra™ 10 system.

This document is written for persons who have experience troubleshooting and replacing computer hardware. If you do not feel confident performing these types of tasks, please contact your Sun™ service representative for assistance.

Please read through this document before beginning any of the procedures.

Package Contents

The Sun Ultra 10 EMI Retrofit Kit contains the following items:

TABLE 1 Retrofit Kit Package Contents

Qty	Description	Part Number
1	ATA-66 CD-ROM drive cable with ferrite filter	370-4944-01
1	Twisted pair Ethernet (TPE) EMI clip	—
2	Disk drive EMI clip	—
1	Antistatic strap kit	257-1007-01
1	EMI retrofit guide	816-2780-11

If any items are missing from your retrofit kit, please contact your Sun service representative for replacement.

Tools

To perform the retrofit, you need the following tools:

- No. 2 Phillips screwdriver
 - Antistatic wrist strap (supplied in retrofit kit)
-

Retrofit Overview

The retrofit involves five tasks:

1. “Preparing the System for Parts Installation” on page 2
 2. “Installing the TPE EMI Clip” on page 3
 3. “Installing the Disk Drive EMI Clips” on page 4
 4. “Installing the New CD-ROM Drive Cable” on page 8
 5. “Finishing the Parts Installation” on page 10
-

Preparing the System for Parts Installation

Read and follow the instructions provided in Chapter 7, “Preparing for Component Replacement”, of the *Sun Ultra 10 Service Manual*, 805-7764. The chapter describes how to power off the system, remove the peripheral cables and system cover, and attach an antistatic wrist strap.

The service manual is available online from the following sources:

- *Sun Ultra 10 Software Supplement* CD-ROM that ships with the system
- <http://docs.sun.com>
- <http://www.sun.com/products-n-solutions/hardware/docs>

Installing the TPE EMI Clip

The twisted-pair Ethernet (TPE) EMI clip can be identified by its elongated shape and two tabs. See FIGURE 1.

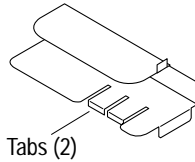


FIGURE 1 TPE EMI Clip

▼ To Install the TPE EMI Clip

For this procedure, refer to FIGURE 2.

1. Locate the TPE connector on the Ultra 10 motherboard.

The connector is located at the rear corner of the system case.

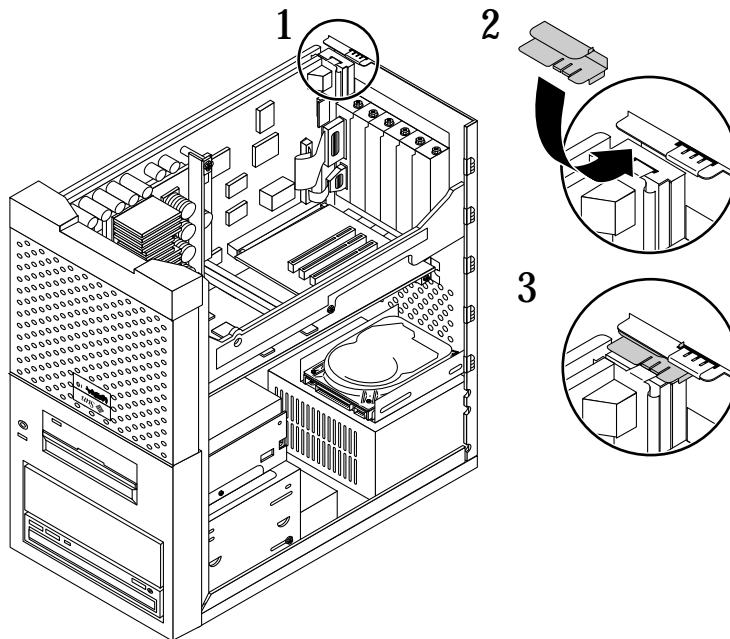


FIGURE 2 TPE Connector and Clip Installation

2. Press the clip into the rear edge of the case, just above the TPE connector.

You might need to compress the clip to fit it into the narrow gap. Once in place, the clip might remain compressed, which is normal for an older chassis.

3. Make sure that the two tabs fit into the slot in the chassis.

Installing the Disk Drive EMI Clips

The disk drive EMI clips can be identified by their open frame design. See FIGURE 3.

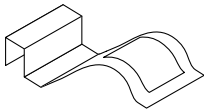


FIGURE 3 Disk Drive EMI Clip

Note – If your system only has one clip, install two more clips. If your system has two clips, install the third clip.

▼ To Install the Disk Drive EMI Clips

1. Disconnect the power, drive, and audio cables from the rear of the floppy drive and CD-ROM drive.

See FIGURE 4.

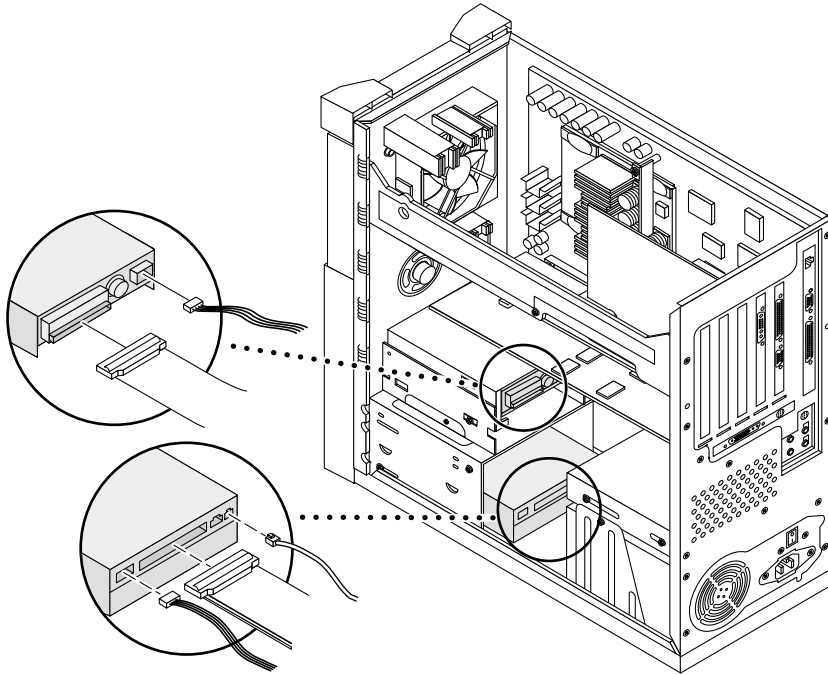


FIGURE 4 Disconnecting the Floppy Drive and CD-ROM Drive Cables

- 2. Using the No. 2 Phillips screwdriver, remove the four screws that secure the CD-ROM drive and the single screw that secures the floppy drive bracket.**
See FIGURE 5. Set the screws aside in a safe place.

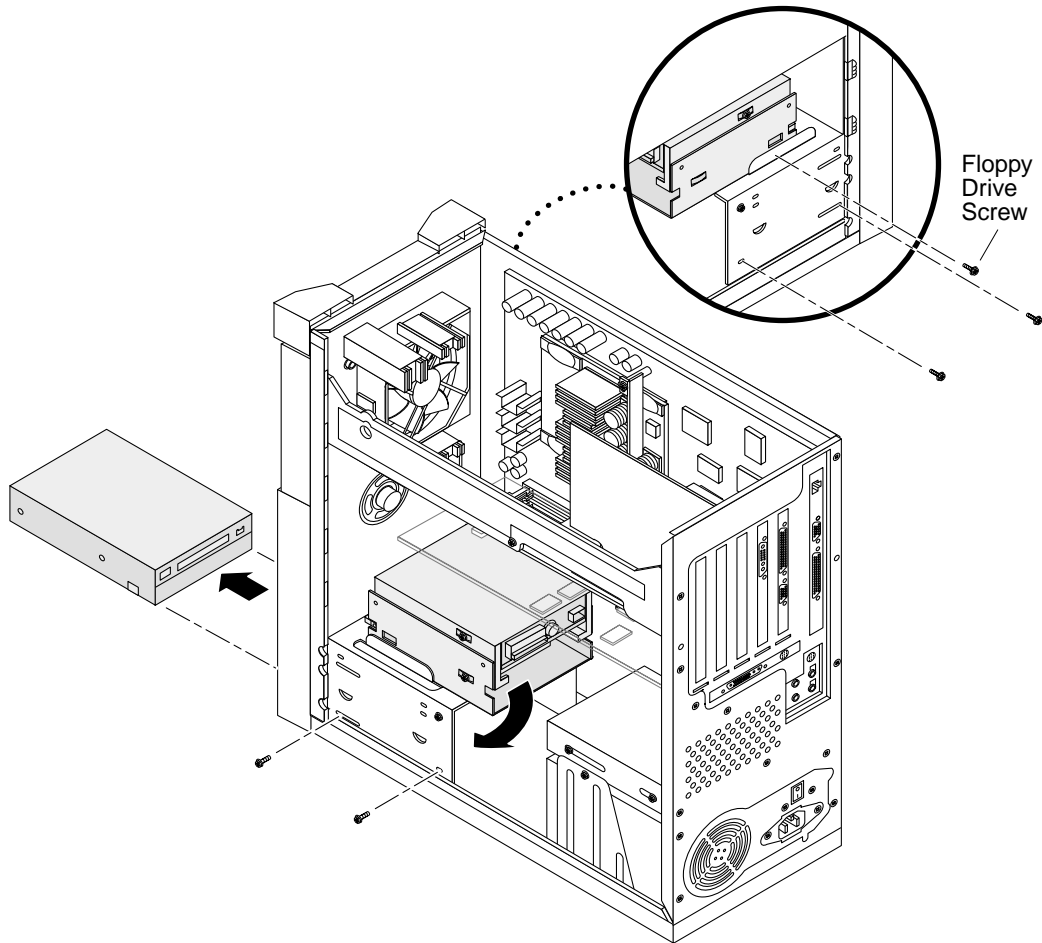


FIGURE 5 Removing the CD-ROM Drive and Floppy Drive Bracket

- 3. Slide the CD-ROM drive and floppy drive bracket out of the chassis.**
See FIGURE 5. Set the drives aside.

4. **Attach the disk drive EMI clips to the locations shown in FIGURE 6.**
There should be a total of three clips.

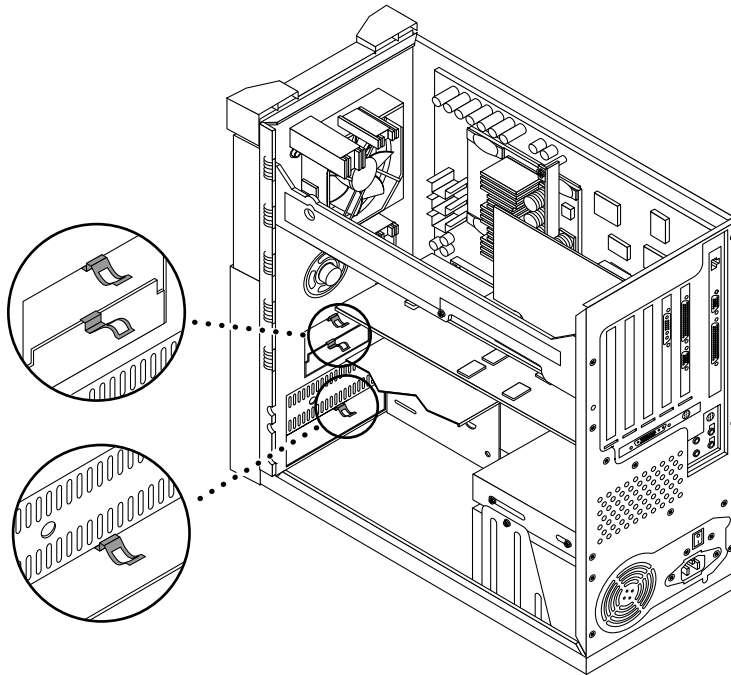


FIGURE 6 Disk Drive EMI Clip Locations

5. **Reinstall the CD-ROM drive and floppy drive bracket and secure them with the screws.**
6. **Reattach all the cables you disconnected in Step 1, except for the CD-ROM drive cable.**
7. **Disconnect the other end of the CD-ROM drive cable from the motherboard at connector J14.**
Discard this cable.

Installing the New CD-ROM Drive Cable

The new CD-ROM drive cable is an 80 conductor, type ATA-66. The end connectors are labeled “DRIVE” and “MOTHERBOARD”. A large ferrite filter is installed near the DRIVE connector. Underneath the ferrite filter are dual lock reclosable fasteners. See FIGURE 7.

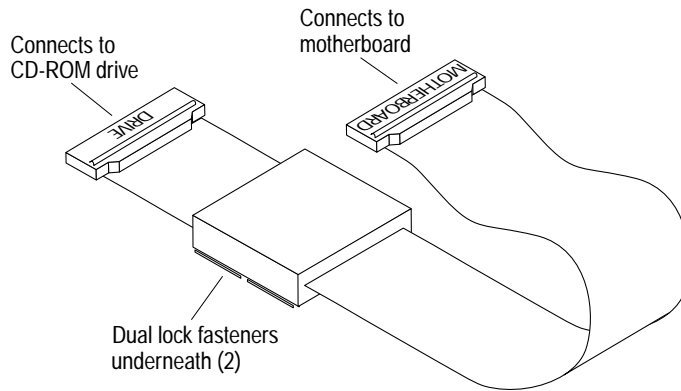


FIGURE 7 Replacement CD-ROM Drive Cable

Note – Do not separate the dual lock fasteners or remove the adhesive backing from the fasteners as this time. You perform this task later in the procedure.

▼ To Install the New CD-ROM Drive Cable

For this procedure, refer to FIGURE 8.

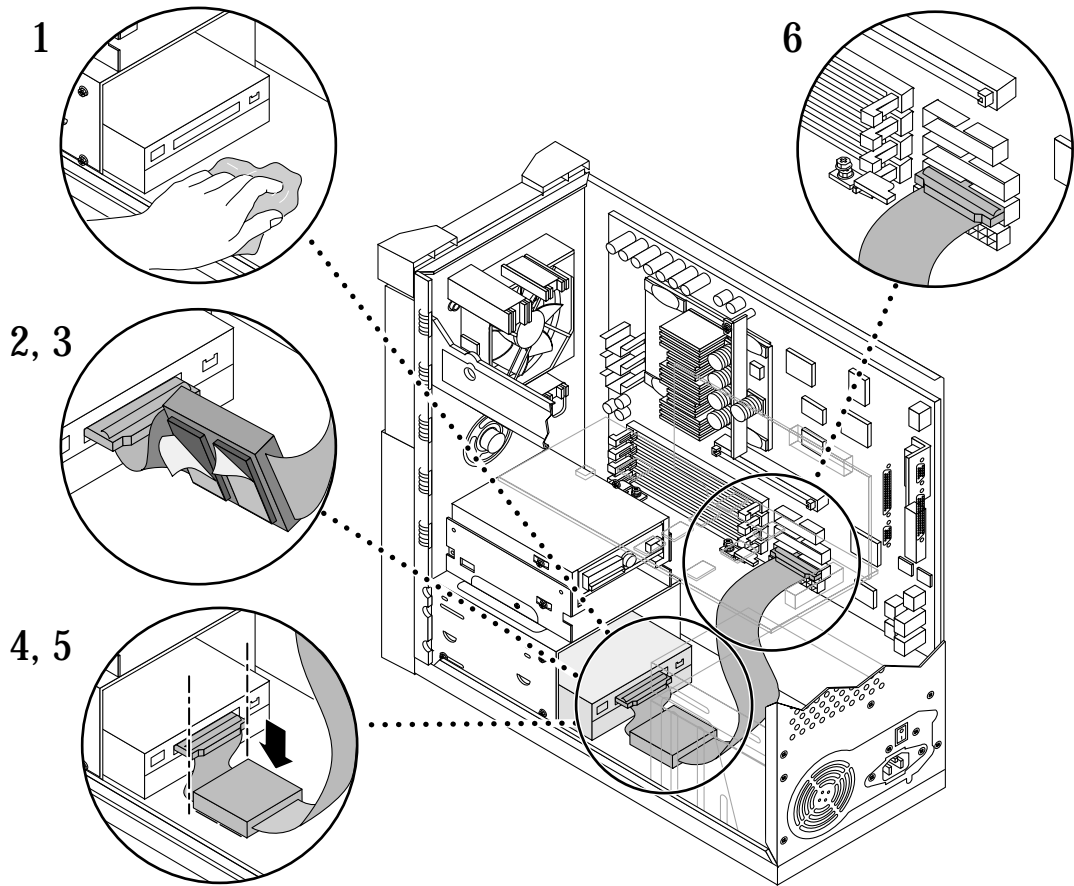


FIGURE 8 Installing the New CD-ROM Drive Cable

1. Clean the inside surface of the chassis between the CD-ROM drive and the power supply.
2. Plug the end of the new cable labeled “DRIVE” into the CD-ROM drive.
3. Peel the adhesive backing from the dual lock fasteners.
4. Align the left edge of the ferrite filter with the CD-ROM drive cable connector.
5. Press the sticky side of the dual lock fasteners to where you cleaned the chassis. Press firmly.

6. Plug the end of the new cable labeled “MOTHERBOARD” into the motherboard at connector J14.

Finishing the Parts Installation

Read and follow the instructions provided in Chapter 11, “Finishing Replacement Procedures”, of the *Sun Ultra 10 Service Manual*, 805-7764. The chapter describes how to remove the antistatic wrist strap, replace the system cover and peripheral cables, and power on the system.